



# SEEDS: The Power of Life in Dormancy

by Jennifer Lamborn

You know that the seed is inside the horse-chestnut tree,  
And inside the seed there are blossoms of the tree, and the chestnuts, and the shade.  
So inside the human body there is the seed, and inside the seed there is the body again.  
-Kabir

## The Role of Seeds in the Cycles of Nature

Now it is wintertime. Like the bears, we, too, experience a kind of dormancy or hibernation as we take time for introspection and go into our “caves” while much plant life and our active, outward selves slow down. In winter, the rhythm of our lives changes as we spend more time inside, savoring coziness, warmth, and time to enter into quiet or what some indigenous tribes call the Dream Lodge. On this view, now is a time to experience *involution*, or a “turning in” on one’s self as we make more contact with the often-instructive forces of the unconscious.

Our gardens have been put to sleep, yet seeds from the harvest remain. Metaphorically, we, too, have “gathered seeds” from the experience of the past year, and now we have time to consider what this experience has meant to us.

Life and its renewal begins and ends in the seed, for a seed is a living plant, dormant in its embryo form. We can think of a seed as representing the transition between seasons of life’s flourishing, creating, as it were, a bridge over death. Like the bear in her cave, a seed waits in stillness for spring.

Involved, a seed can develop into a plant when conditions are favorable, or a seed can develop into us, if we eat it.

## Eating the Body of the World: Food Energetics

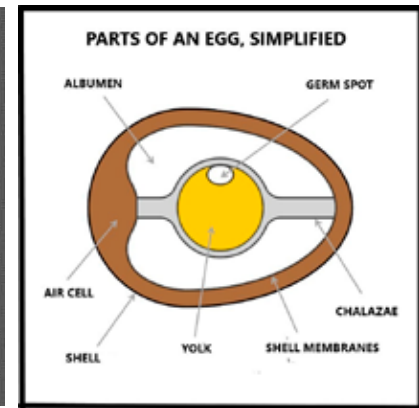
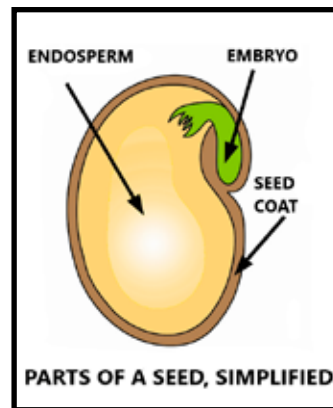
In *The Omnivore’s Dilemma*, journalist and food activist Michael Pollan writes that “the way we eat represents our most profound engagement with the natural world. Daily, our eating turns nature into culture, transforming the body of the world into our bodies and minds.” We have all heard the saying “you are what you eat,” but in his work, Pollan focuses not just on *what* we eat, but encourages us to consider the nature and extent of our awareness about the *ways* in which we seek, prepare, eat, and relate to food in general.

Pollan takes a strong stand against “nutritionism,” the scientific approach to food that has, on his account, benefited

the Big Food industry far more than our collective health.<sup>1</sup> When we make food choices based solely on scientific analysis, we not only strip food of its aesthetic qualities and ethnic traditions, but we cause ourselves “food anxiety” since few of us are actually biochemists. For example, how many of us can explain exactly why selenium is an important mineral for metabolism? It is both intimidating and disempowering to make choices based on information we don’t fully understand. Within this scientific framework, our relationship to food thus becomes abstract and remote instead of intimate, resonant, and pleasurable.

Complementing Pollan’s critical stance on “scientific eating,” proponents of the principles of “food energetics” likewise believe that the food we eat is more than the sum of its constituent nutrients. Food energetics is a cornerstone in Ayurvedic philosophy, macrobiotics, traditional Chinese medicine, and other traditional cultures. On this

view, characteristics of food such as how it grew, where and when it grew, its color, its structure and shelf-life as well as its effect on one’s physical and psychological constitution are to be considered when choosing what to eat. In the introduction to his book *Food Energetics*, Steve Gagné explains that the study of “the energetics of food” is actually a study of *self-knowledge* insofar as “the qualities of yourself are what you will naturally tend to seek in the foods you choose.” Thus, he advises that “you must be able to recognize what you are—or



what you would like to be—in order to consciously recognize the foods that will nourish that.”

## Eating Seeds

So, when we think carefully about what it means to “eat” part of the natural world and turn it into ourselves, a seed shows up as most apt winter food, especially when we think of the seed as “life in hibernation.”

It is remarkable that a plant seed is analogous to an egg in the animal kingdom; both eggs and seeds develop from the union of male and female sex cells, and both act as structures that protect and supply nutrients to a developing embryo.

Plant seeds have three basic parts: the multicellular **embryo**, a tiny plant, the **endosperm**, the source of stored food, and the **seed coat** which consists of one or more protective layers. Analogously, eggs have a **yolk** (with germ, if fertilized), the **albumin** or white, the source of stored food, and the protective **shell** and its membranes. We, too, require a protective layer in these cold months as we provide sanctuary and nourishment for our winter dreaming, still embryonic.

Because of their similar function, both seeds and eggs are nutrient-dense. While seeds, if stored in a cool and dry place, can last for years (depending on the variety), refrigerated eggs have a shelf life of 5-6 weeks, and unrefrigerated eggs have a shelf life of 7 to 10 days. Whereas eggs are more protein-dense than seeds (one egg provides ~ 6 g of protein compared to ½ cup of pumpkin seeds for the same amount), unless a chicken egg has been fertilized--unlike a seed--it is not alive. If we think in terms of *chi*, or life force, the seed remains a living food until it is cooked or eaten.<sup>2</sup> Furthermore, on the macrobiotic view, foods that have a long storage life are more *yang* or contractive, helping us to retain our warmth in the colder months.<sup>3</sup>

<sup>1</sup>In his 2008 book, *In Defense of Food*, Pollan explores the case of the low-fat diet campaign that was recommended by government panels, nutrition scientists, and public health officials beginning in the 1970s. This doctrine rested on the (now disproven) assumption that that dietary fat is responsible for chronic disease--especially heart disease--and should be avoided at all costs. The result of this shift in the Standard American Diet since then is responsible for the dramatic increase of obesity and diabetes millions of Americans live with today. As people avoided dietary fats, they increased their consumption of refined carbohydrates and sugars. While this shift was profitable for food business as subsidized wheat, corn and soy can be processed into cheap “vitamin fortified” food that is “low fat,” the overall health of Americans has declined. Such is one legacy of “scientific eating.”

<sup>2</sup>Thanks to Evan, our bulk buyer, the organic sunflower seeds at the co-op are no longer pasteurized ever since he began buying them from Tierra Farms last year. Pasteurized seeds may still bear the label “raw,” but they are no longer living plants.

<sup>3</sup>Macrobiotics views all food and substances on a continuum between *yin* (expansive) and *yang* (contractive). Yin foods have a loose, upward moving structure, perish easily, and are cooling. Yang foods have a dense, inward or downward moving structure, store well, and are warming.

Grains grow from the seeds of grasses while nuts come from the seeds of a tree, and beans are the seeds of legumes. All these foods have a similar structure and function and therefore store food for the development of a future plant-food that we animals can eat. Most seeds and nuts, however, do not require any processing to be edible, whereas all grains and legumes must be soaked, fermented or thoroughly cooked in order to avoid sickness. Our ancestors were likely eating seeds and nuts well before they began cultivating grains and beans.

### Seed Nutrition

To be clear, “nutritionism” isn’t *wrong*; rather, the problem is that it can lead to a reductionist view of food, i.e., the view that reduces food to nothing more than a vehicle for nutrients. Scientific analysis of food is undoubtedly valuable and has helped us address many illness-causing nutritional deficiencies. Nonetheless, if we succumb to a reductionist view of food, we will tend to view eating mechanistically and perfunctorily rather than holistically and pleasurably. It is useful to explore the nutritional analysis of seeds as long as we don’t lose sight of their “energetic profile”: the conditions in which they grow, how they store, and how they appear to us within the contexts of the meals in which we eat them, the lives we lead, and the world in which we live.

Seeds are often overlooked as a staple in people’s diets even though most of us are generally aware that they benefit overall health. Some people worry that seeds are too fattening as they are undeniably packed with calories; others may not know how to incorporate them into meals. Studies show us that seeds can improve digestion, boost our immune system, protect our hearts, reduce the risk of diabetes, build strong bones, help us sleep, prevent disease (they are high in anti-oxidants), reduce inflammation, and eliminate unwanted weight.

Nutritional analysis reveals that seeds contain high levels of essential mono- and polyunsaturated fatty acids, a wide range of the amino acids needed to form protein, vitamins A, B, C, and E, and the minerals calcium, magnesium, potassium, zinc, iron, selenium, and manganese. Low on the glycemic index, seeds are a good source of slow release energy, helping to stabilize blood sugar levels. Because they are such

*For brief descriptions of the histories and origins, the nutritional benefits, and ways to eat some of some of the many seeds sold at the Co-op, you can check out the Silver City Co-op website at <https://www.silvercityfoodcoop.coop>*

a dense food, seeds tend to satisfy our hunger by keeping us feeling fuller longer than other foods.

### The Question of Phytic Acid

All seeds contain phytic acid, or phytate. Some people worry about the presence of this chemical in seeds (as well as in nuts, whole grains, and legumes). Phytate is called an “anti-nutrient” because it impairs the absorption of iron, zinc, and, to a lesser extent, calcium. Seeds store phosphorus in the form of phytic acid. When a seed sprouts, phytic acid is degraded and phosphorus is released to nourish the young plant. It’s important to note, however, that phytic acid only impairs the absorption of minerals *during a particular meal*, but not throughout the day. Moreover, people with healthy intestinal flora usually produce enough phytase, the enzyme that breaks down phytic acid, to eat seeds freely. For most of us who eat a well-balanced diet, phytic acid doesn’t cause mineral deficiencies. By contrast, in poor countries where people’s diets consist mostly of grains, phytate-induced mineral deficiencies do occur.

Nevertheless, for those of us with compromised digestive systems, soaking seeds effectively degrades phytic acid and may be the best option. To make the soaked seeds more palatable, they can be dried in a low oven or dehydrator.

The phytic acid story, however, is not so simple. Phytates are also beneficial! They are powerful anti-oxidants, and research indicates that they may improve bone density, prevent and fight cancer, block starch absorption (thereby stabilizing blood sugar levels), and escort toxic metals such as lead out of the body (Schlemmer *et al*). Dr. Andrew Weil and others believe that the benefits of eating seeds as well as the benefits of phytic acid outweigh concerns for its mineral-binding properties.

The “controversy” over phytate is just one example of how “scientific eating” can stand between us and our food, causing us disquiet and inhibiting our confidence in the power of intuition to choose food wisely.

### Sprouting Seeds

The fact that we can sprout seeds only adds to their allure. Sprouting unlocks even more nutrients from seeds, creates new vitamins, and reduces tannins and lectins.<sup>4</sup> Seeds contain compounds that keep them from sprouting until conditions are right. But once a seed sprouts, those compounds are broken down by a flood of enzymes that makes the nutrients in the seed more available so that the baby plant has the energy it needs to grow. The theory is that when we eat sprouted foods, their nutrients are more available to us as well.

If we leave the science lab for a moment, the question of whether or not to sprout seeds might hinge on whether we are attracted to *yang*, contractive, enfolded food or *yin*, expansive, unfolding food. Each one of us is different, and each day is different. As Gagné suggests, we must be able to recognize what we are and what we would like to be in order to recognize the foods that will support us.

### The Mystery of a Seed

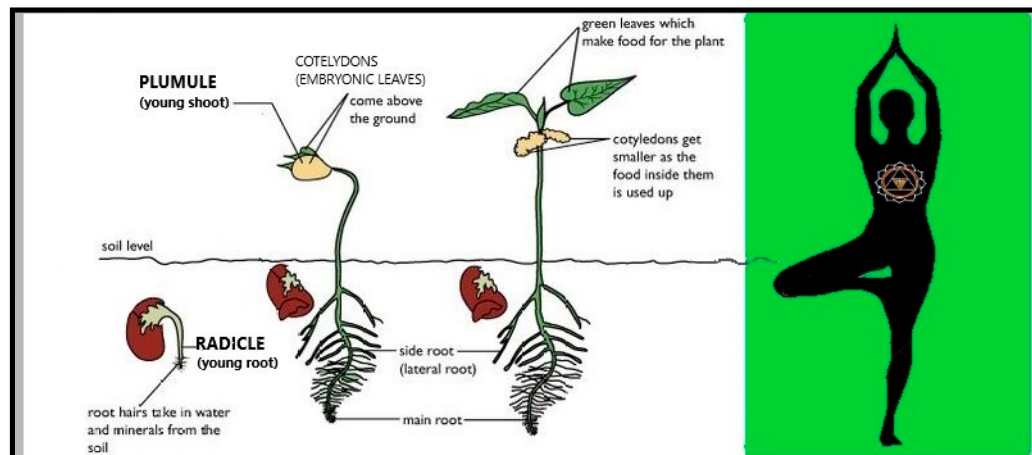
Behold a seed in the palm of your hand. The power of the tiny seed is hard to fathom. No amount of scientific investigation can explain the mystery of “life longing for itself.”<sup>5</sup> Anat Vaughan-Lee, a Sufi dreamworker, compares the seed to breath. It is *given*. We, too, come from a seed and share in this mystery of *givenness*. Perhaps the quiet time we spend in the stillness of our “caves” will allow us to remember that when we eat, we merge with specific qualities of the natural world.

Albert Einstein believed that “the intuitive mind is a sacred gift and the rational mind is a faithful servant.” He understood that “we have created a society that honors the servant and has forgotten the gift.” Let us remember the gift.



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<sup>4</sup>Tannins and lectins are also considered anti-nutrients; both play roles in a plant’s defense system.

<sup>5</sup>This phrase is borrowed from Kahlil Gibran’s meditation on children in *The Prophet*.